

WHAT IS CLAIMED IS:

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1. A method for administering a drug to a patient, the method comprising:
coupling a valve system to the patient's airway, wherein the valve system is configured to prevent or impede respiratory gases from flowing into the lungs for at least some time such that the intrathoracic pressure is less than atmospheric pressure;
introducing a drug into the patient;
lowering the intrathoracic pressure using the valve system to cause blood to flow into the thorax and thereby increasing vital organ perfusion to enhance the circulation of the drug.
2. A method as in claim 1, wherein the patient is under cardiac arrest, and wherein the intrathoracic pressure is reduced during a decompression phase of CPR when performing CPR and also preventing or inhibiting respiratory gas flow into the lungs with the valve system.
3. A method as in claim 1, wherein the intrathoracic pressure is reduced by breathing in while preventing or inhibiting respiratory gas flow to the lungs with the valve system.
4. A method as in claim 1, wherein the intrathoracic pressure is reduced by stimulating the phrenic nerve to cause the respiratory and/or abdominal muscles to contract while preventing or inhibiting respiratory gas flow to the lungs with the valve system.
5. A method as in claim 1, wherein the intrathoracic pressure is reduced by squeezing the chest and relaxing the chest with a chest caress while preventing or inhibiting airflow to the lungs with the valve system.
6. A method as in claim 1, wherein the valve system is configured to prevent respiratory gases from entering the lungs until a threshold negative intrathoracic pressure in the range from about 0 cm H₂O to about 40 cm H₂O is exceeded.
7. A method as in claim 1, wherein the drug is administered by a process selected from a group consisting of intravenously, through the patient's bone, through the patient's airway, orally, nasally, endobrochially, rectally, and transdermally.

8. A method as in claim 1, wherein the drug is administered through a facial mask or the valve system.

9. A method as in claim 1, wherein the drugs are selected from a group consisting of glucose, sodium bicarbonate, oxygen, steroids, vasopressor drugs, anti-arrhythmic drugs, anti-seizure, anti-asthma, anesthetics, and cooling solutions to cool the brain during cardiac arrest.

10. A method as in claim 1, wherein the valve system is configured to permit respiratory gases to exit the patient's lungs, and further comprising forcing respiratory gases from the lungs and out the valve system.

11. A method as in claim 1, wherein the valve system is configured to prevent respiratory gases from exiting the patient's lungs until a positive end expiratory pressure in the range from about 0 cm H₂O to about 20 cm H₂O is exceeded.

12. A method as in claim 1, wherein the valve system is coupled to a facial mask that is placed over the mouth and nose, and further comprising removing the drug from a drug storage compartment of the facial mask.

13. A method as in claim 1, wherein the valve system is coupled to an inhalation device that includes the drug, and further comprising inhaling from the inhalation device to administer the drug.